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Notice of Allowability

Application No.

09/678,906

Applicant(s)

HANSON ET AL.

Examiner

Mary J. Steelman

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 January 2005, 19 May 2005.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☒ The drawings filed on 31 January 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input checked="" type="checkbox"/> Other <u>Copy of accepted drawing</u> . |


TUAN DAM
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. This Office Action is in response to Amendments and Remarks received 31 January 2005. Per Applicant's request, the Specification has been amended. Per Applicant's request, Replacement Sheet for Fig. 1 & Fig. 2 has been accepted. Per Applicant's request, claims 1, 4, 7, 9, 10, 11, 12, 14, 16, 17, 18, and 26 have been amended. By Examiner's Amendment, which follows, claims 1, 5, 10, 16, 17, 19, 21, and 26 have been further amended. Claims 1-26 are pending.

Claim Objections

2. In view of the amendments to the claims, the prior objections are hereby withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gero McClellan, Reg. No. 44,227 and Jon Stewart, Reg. No. 54,945 on 18 and 19 May 2005.

By Examiner's Amendment claims 1, 5, 10, 16, 17, 19, 21 and 26 are amended.

The application has been amended as follows:

IN THE CLAIMS:

1. (Currently Amended) An apparatus configured for automatic instantiation of templates comprising:

a processor;

memory in communication with the processor;

a first operating system residing in the memory and executable by the processor;

a set of source code modules containing source code; and

at least one computer program, the at least one computer program comprising:

(i) a template instantiation portion configured to generate template source code for each occurrence of a template appearing in the set of source code modules, and further configured to store a template information file in a repository for each such occurrence, and

(ii) a cross compiler portion configured to generate template object code modules from the template source code, wherein the template object code modules are configured for use linking an object code module on a second operating system different from the first operating system.

5. (Currently Amended) A method for automatic instantiation of templates for a cross compiler, comprising:

providing source code;

extracting template information from the source code;

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providing the template information to a template repository;
generating template source code in response to information from the template information; and
using the cross compiler to generate a first template object code from the template source code; and
wherein the first template object code is ~~operable~~ configured for linking with object code modules on a target computer system having a linker.

10. (Currently Amended) A method for automatic instantiation of templates from source code for use with a cross compiler residing on an origination computer system, comprising:

providing a template repository in communication with the cross compiler;
providing source code modules;
generating at least one template information file from the source code modules using the cross compiler;
providing the at least one template information file to the template repository;
generating at least one template source code module from the at least one template information file; and
generating object code modules from the source code modules and the at least one template source code module using the cross compiler,
wherein the object code modules are ~~is~~-linkable on a target computer system having an operating system different in kind than that of the origination computer system.

16. (Currently Amended) A system for cross compilation with automatic template instantiation, comprising:

a first computer under control of a first operating system, the first computer comprising:
source code modules;

a cross compiler configured to generate object code modules and template information files from the source code modules;

a template repository configured to receive the template information files; and

a program configured to:

generate a list of the template information files, template source code modules, and a list of template source code modules, the program further configured to locate the list of the template information files, the template source code modules and the list of template source code modules in the template repository, the program further configured to employ the cross compiler to generate template object code modules from the template source code modules, wherein the template object code modules are linkable with object code modules on a second computer under control of a second operating system.

17. (Currently Amended) The system of claim 16 further comprising:

~~a~~ the second computer programmed with ~~a~~ the second operating system different in kind from the first operating system, the second computer in communication with the first computer to receive the template object code modules.

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19. (Currently Amended) The system of claim 18, wherein the machine-readable signal bearing medium is a transmission medium comprising a computer network connection between the first and second computer.

21. (Currently Amended) A signal-bearing medium containing a program which, when executed by a processor in response to receiving template information, from a repository of template information, causes execution of a method comprising:

generating template source code in response to the template information; and

invoking a cross compiler to generate a first template object code corresponding to the template source code;

wherein the first template object code is linkable, with a set of object code modules generated from source code modules, on a target computer system having a linker without template instantiation support.

26. (Currently Amended) The method of claim 12, further comprising:

generating a template information file list associated with the at least one template information file; and

generating a list of the at least one template source code ~~file~~-module.

4. The following is an examiner's statement of reasons for allowance:

As Applicant has noted on page 14, 5th paragraph, Faiman does not teach or suggest "a template instantiation portion that generates template source code." Additionally as noted on page 15, 2nd paragraph, Faiman fails to teach or suggest "the generation of additional source code (template source code), ultimately compiled into an object module that may be linked by a target system." Also, as noted on page 16, first paragraph, Faiman fails to teach or suggest "generating the template information files from the source code modules..." All independent claims have limitations relating to 'source code', 'template source code', 'template information files / template information', 'store template information file in a repository / template information repository', 'template object code', and 'linking on the target computer'. Cited prior art of record, taken alone or in combination, fails to disclose the above-cited limitations, as recited similarly in all independent claims 1, 5, 10, 16, and 21 and a combination would not be obvious. Thus, all remaining dependent claims, claims 2-4, 6-9, 11-15, 17-20, and 22-26 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

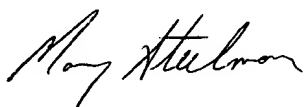
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached at (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman



05/23/2005



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SUPERVISORY PATENT EXAMINER



Replacement Sheet

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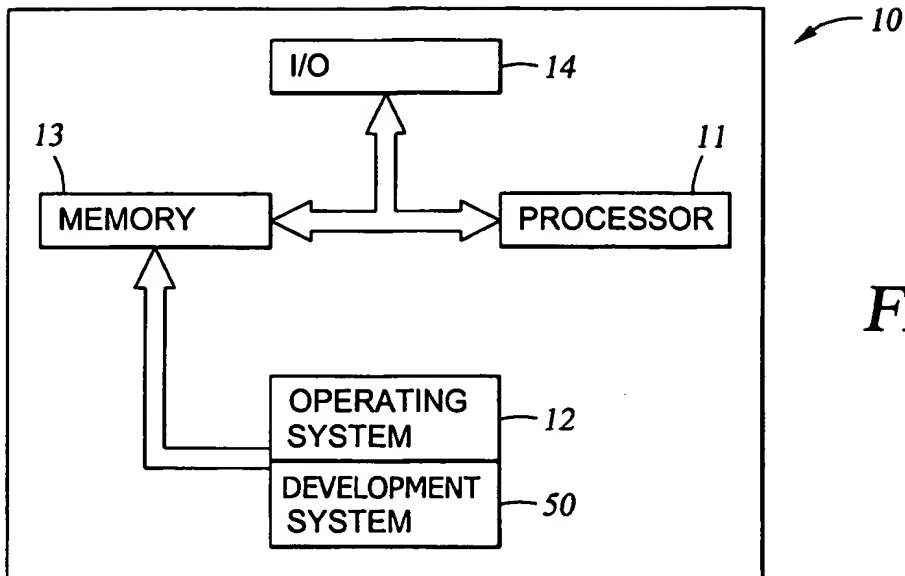


Fig. 1

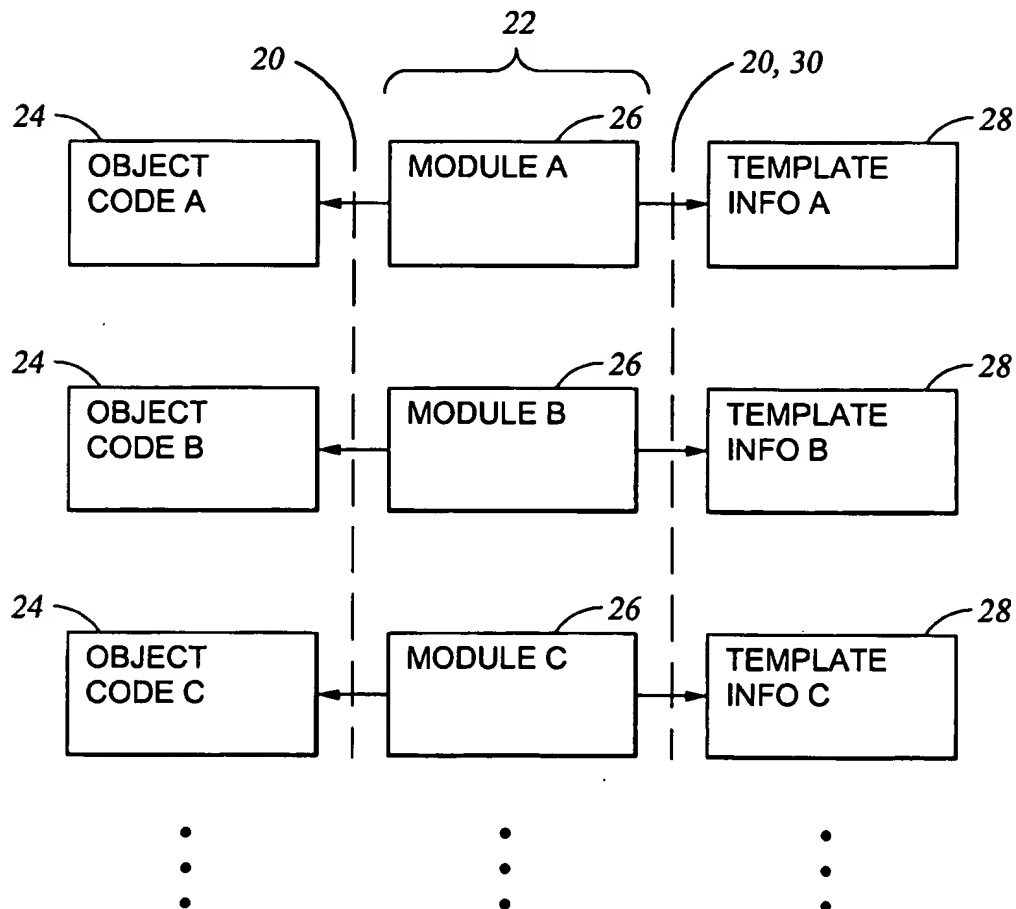


Fig. 2